Chapter 2
Financial Program

Our Water.
Our Future.

This chapter describes the likely methods of financing the estimated cost of operating SPU's water system and investing in the capital projects described in Chapter 1 of Part II.

2.1 FINANCIAL POLICIES

Financial management of the water system is directed by formal financial policies adopted by the City Council and by informal guidelines that have evolved over time in response to specific issues. These policies and guidelines are used to decide how to finance water system operations and capital projects. They are intended to ensure that the water system finances its costs in such a manner that specific policy goals are achieved. These goals are:

- To ensure the financial integrity of the water utility.
- To moderate rate increases for water system customers over the near and medium term.
- To ensure an equitable allocation of capital costs between current and future ratepayers.

In 2005, the City Council adopted new water system financial policies that reflect changes and additions to the financial policies adopted in 1992. The new financial policies are more appropriate for the current financial environment and capital financing requirements, and also reflect changes made in 2005 to the conditions for activity in the Revenue Stabilization Subfund. The financial policies are as follows:

1. **Maintenance of Capital Assets.** For the benefit of both current and future ratepayers, the municipal water system will seek to maintain its assets in sound working condition. Future revenue requirement analyses will include provision for maintenance and rehabilitation of facilities at a level intended to minimize total cost while continuing to provide reliable, high quality service.

2. **Debt Service Coverage.** Debt service coverage on first-lien debt should be at least 1.7 times debt service cost in each year on a planning basis.

3. **Net Income.** Net income should generally be positive.

4. **Cash Funding of the Capital Improvement Program.** Current revenues should be used to finance no less than 15 percent of the municipal water system's adopted CIP in any year, and not less than 20 percent of the CIP over the period of each rate proposal. Cash in excess of working capital requirements may be used to help fund the CIP.

5. **Eligibility for debt financing.** Unless otherwise authorized by the City Council, the following criteria must be met before project expenditures are eligible for debt financing:

   - Project is included in the CIP.
   - Total project cost exceeds $50,000.
   - Project has expected useful life of more than two years (more than five years for information technology projects).
   - Resulting asset will be owned or controlled by SPU, is part of the regional utility infrastructure, or represents a long-term investment for water conservation.
   - Consistent with generally accepted accounting practices, project costs include those indirect costs, such as administrative overhead and program management, than can be reasonably attributed to the individual CIP project.

Revenue Stabilization Subfund is available to offset shortfalls in metered water sales revenues or to meet financial policies.

6. **Revenue Stabilization Subfund.** A target balance of $9 million will be maintained in the Revenue Stabilization Subfund, except when withdrawals below this level are needed to offset shortfalls in metered water sales revenues or to meet financial policy requirements. Funds in excess of the minimum balance may be used to meet operating expenses, pay CIP expenditures, or meet financial policy requirements.

SPU may also make discretionary deposits to the Revenue Stabilization Subfund, provided that these discretionary deposits are in excess of the amounts required to meet the financial policy requirements. Should the balance in Subfund fall below the target balance, within one year SPU shall submit a water rate proposal that rebuilds the balance in the Subfund.

7. **Cash Target.** The target for the year-end operating fund cash balance is one-twelfth of the current year's operating expenditures.

8. **Variable Rate Debt.** Variable rate debt should not exceed 15 percent of total outstanding debt. Annual principal payments shall be made on variable rate debt in a manner consistent with fixed rate debt.

The financial policies help determine how much revenue the utility must collect from its customers each year to meet the cost of operations, maintenance and repair, and capital improvements. Because of this, rate impacts stemming from specific courses of action recommended in this water system plan cannot be determined without also considering what financial policies are to be followed. If an action's rate impacts are unacceptable, the action can be scaled back to reduce costs or alternative financial approaches can be considered to spread costs over a longer period.

2.2 FINANCIAL HEALTH

Financially healthy organizations have the flexibility to respond to unexpected circumstances. Such circumstances may include new, unexpected-but-essential tasks or a shortfall in earnings. Flexibility can mean redirecting expenditures, borrowing money to meet an unexpected need, or other approaches.

The use of debt to finance a significant amount of new and replacement infrastructure has kept rates low but increased the amount of revenue used to repay loans.

In the past, the water system financed a significant amount of new and replacement infrastructure through the use of debt. While it helped keep rates low at that time, it has also greatly increased the portion of revenue that is used to pay off the debt. In 1990, 20 cents of every revenue dollar was used to repay loans. In 2006, 40 cents of every revenue dollar was used to repay loans. This means that SPU has less flexibility in how it spends its revenues. Current

revenues that are used for new facilities are the most flexible resource for meeting unexpected needs.

The increasing commitment of each revenue dollar to pay off debt makes sources of financial instability more risky because SPU has less flexibility to adjust to revenue shortfalls and unexpected needs. One cause of revenue fluctuation for SPU is seasonal rates, which are used to discourage water use in the summer when water is most scarce. Variations in summer weather can cause annual water use to vary from an average year by 2 to 3 percent. Since this variation happens in the summer, when rates are higher than the winter, summer weather variation can result in revenue shortfalls of 3 to 4 percent. The Revenue Stabilization Subfund can be used to offset revenue shortfalls beyond these levels.

Reducing this weather-related revenue risk could also be accomplished by reducing the difference between winter and summer rates. Higher rates would provide more annual revenue and therefore more of a "cushion" against revenue shortfalls. However, changing the seasonal rate structure would reduce incentives to conserve water in the summertime.

There are two key indicators used to gauge SPU's financial performance: debt-service coverage and debt-to-assets ratio.

There are two key indicators used by the financial community that provide a measure of how well SPU is doing in the areas identified above. The first, debt-service coverage, is an annual measure of the revenue an organization has available to repay debt, divided by debt payments. Debt-service coverage is calculated after operations expenses and some taxes have been paid. SPU's debt-service coverage policy target is 1.70. SPU is expected to meet this target in the period covered by this plan.

The second key indicator is the debt-to-assets ratio. The debt-to-assets ratio is the outstanding debt of the organization divided by the sum total of its assets. The debt-to-assets ratio shows how reliant the organization is on debt to finance its infrastructure and how much flexibility is has to respond to unexpected circumstances. SPU's debt-to-assets ratio is currently higher than comparable utilities and is at a level that could be a concern to the financial community, which could result in higher debt

financing costs if investors view SPU as overextended. In recent years, however, SPU has had excellent bond ratings.

SPU has been decreasing the levels of debt financing of its capital improvement program over the past few years and is expected to continue to do so. This increase in revenue financing of a very large capital program, combined with higher debt service, will drive significant rate increases in the near future. However, by investing more current revenue in infrastructure, SPU will reduce its reliance on debt and thereby reduce its debt-to-assets ratio.

A summary of SPU's financial results for its water utility over the past six years is shown in Table 2-1.

Table 2-1. Financial Revenues and Expenditures, 2000–2005 (in millions of dollars)

	2000	2001	2002	2003	2004	2005
Revenues						
Water Sales	$ 104	$ 104	$ 115	$ 133	$ 140	$ 136
Other (tap fees, interest income, operational grants, reimbursements, etc.)	$ 9	$ 5	$ 4	$ 5	$ 5	$ 11
Total:	$ 112	$ 109	$ 119	$ 138	$ 144	$ 147
Expenditures						
Operations and Maintenance	$ 44	$ 52	$ 52	$ 54	$ 54	$ 60
Taxes	$ 11	$ 11	$ 12	$ 14	$ 15	$ 20
Debt Service	$ 44	$ 47	$ 49	$ 51	$ 55	$ 59
Revenue-Financed Construction	$ 5	$ 3	$ 5	$ 13	$ 11	$ 4
Total:	$ 104	$ 112	$ 119	$ 132	$ 134	$ 144
Net of Revenues and Expenditures:	$ 8	$ -3	$ 0	$ 6	$ 10	$ 3

2.3 FUNDING SOURCES

The primary source of funding for SPU's water utility are revenues derived from the wholesale and retail sales of treated drinking water.

The primary source of funding for SPU's water utility are revenues derived from the wholesale and retail sales of treated drinking water. To finance capital facilities, SPU relies primarily on borrowing. SPU also receives contributions from developers, but that funding source plays a much smaller role in capital financing. The water system is in a period of unprecedented growth in capital expenditures. From 2007 through 2030, SPU plans to meet or exceed its financial policy of financing 20 percent of its capital facilities plan with revenues. However, because of

the large size of the CIP in the next six years, SPU will still rely heavily on borrowing. This will result in larger rate increases in the near term but will increase future flexibility to respond to unexpected events and will help maintain or improve current bond ratings.

2.3.1 Water Rates

In 2005, water sales made up 96 percent of operating revenues.

In 2005, water sales made up 96 percent of operating revenues. Rates must provide sufficient revenue to operate the water system. Rate-setting objectives include:

- Provide financial soundness.
- Advance economic efficiency.
- Promote customer equity.
- Encourage customer conservation.
- Contribute to transparency and customer understanding.
- Reduce impacts on low-income customers.

The affordability of rates to retail customers is also an issue considered by City Council during rate setting.

Rates are set by customer class. The major customer groupings are wholesale and retail. Wholesale rates are set as described in their contracts with SPU. Retail customers are further categorized into residential and commercial classes. The rate structure for each of the customer classes includes a fixed monthly charge, which is graduated by the size of the service, and a seasonally-differentiated commodity charge. The combination of fixed and commodity charges can be fine tuned to meet the rate objectives identified above. For example, the fixed charge can be set to recover costs that are unrelated to the amount of water used, such as billing and meter reading. Similarly, seasonal commodity rates can be set to reflect the cost differentials that exist between winter, when stream flows are high and demand is low, and summer, when stream flows are low and demand is high. Setting rates so that the bills of individual customers reflect the cost of serving them is especially important in achieving customer equity because the most commonly used definition of equity is that bills reflect costs.

To encourage conservation in the summer period, the residential commodity rate is structured with three tiers. The first tier (up to 500 cubic feet (CCF) is designed as a "lifeline" to meet basic needs. The second tier (from 5 to 18 CCF) is billed at a higher rate than the first. The third tier (above 18 CCF), instituted in 2001 in response to a citizens' initiative for water conservation (I-63 SO, described in Part I), is set at an even higher rate to discourage the use of very large volumes of water, often for irrigation.

System-wide rates have increased and will continue to increase faster than the rate of inflation. A significant portion of the rate increases are due to debt service on prior capital investments, such as the Tolt and Cedar Treatment Facilities. The large CIP for the next six years is also another significant contributing factor. The system-wide average rate is expected to increase from $2.30 per CCF of water in 2007 to a peak of $2.49 per CCF in 2015 (2006 dollars). This rate path, and the costs that drive the total rate, are shown in Figure 2-1.

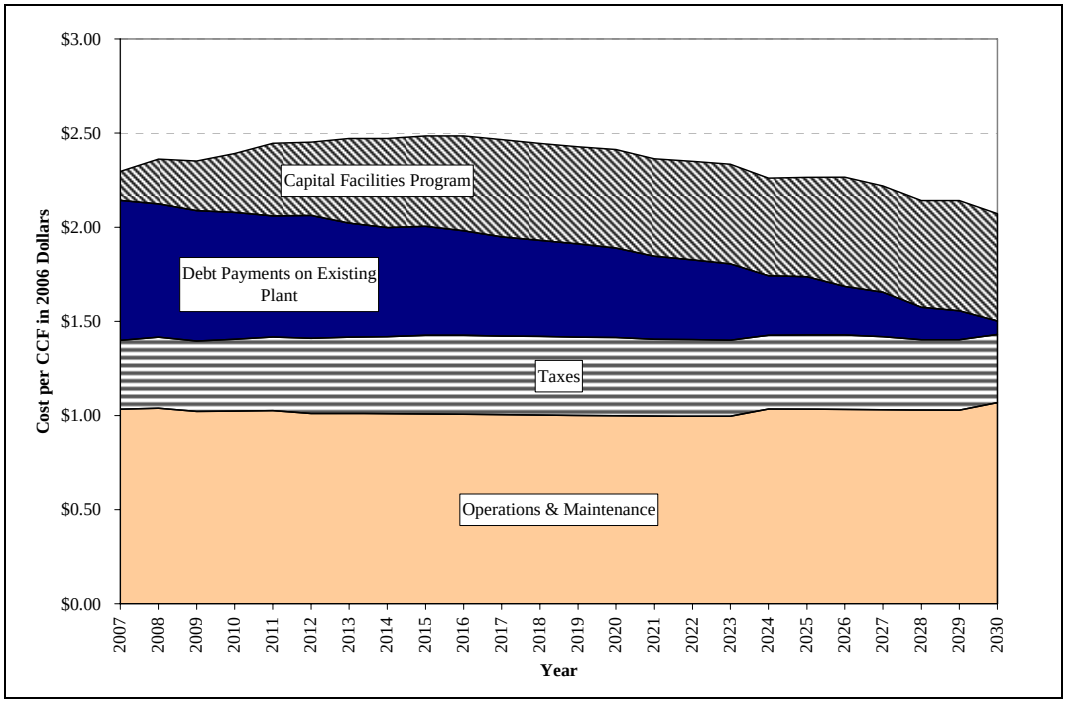

Figure 2-1. Rate Component Costs

As mentioned previously, a large driver of rates in the near term is the debt service associated with investments in the water system that have already been made. Without recent improvements to the system, rates would be comparable to those that existed after the original construction period, as shown in Figure 2-2.

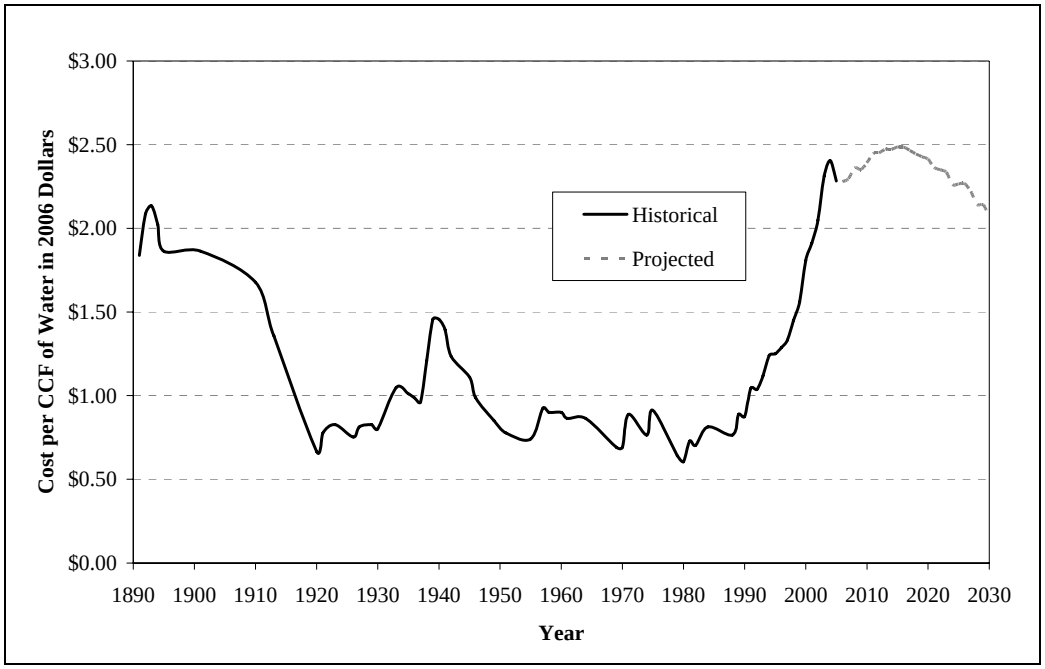

Figure 2-2. Average Rate per CCF of Water (2006 dollars)

Future rate levels depend on both the cost of providing water and the amount of water sold. With demand for water forecasted to generally decline through 2030, there will be no growth in water sales to absorb higher costs.

While rate forecasting is generally done for the system as a whole, there is a categorical difference between the rates paid by wholesale customers and the rates paid by retail service customers (Figure 2-3).

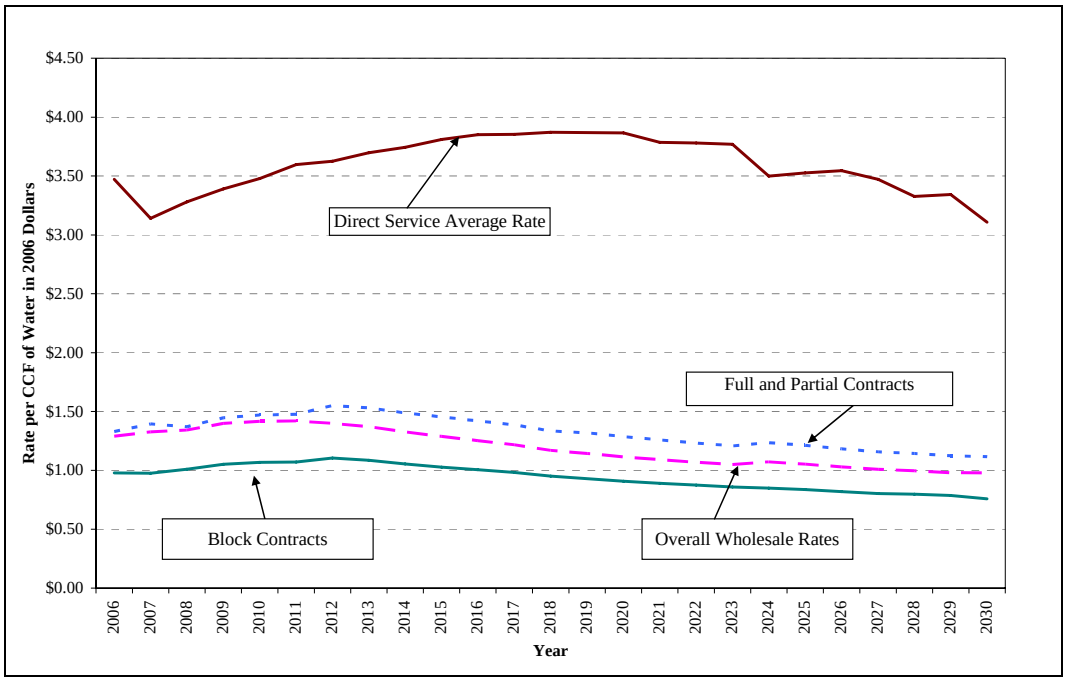

Figure 2-3. Comparison of Wholesale and Retail Water Rates

Wholesale customers do not pay for SPU's distribution system, since they are not served by these facilities. They pay only for their share of water supply, treatment, and transmission. The rates charged by SPU's wholesale customers to *their* customers include the cost of the wholesale customer distribution systems. Most wholesale customers pay a set rate for a base water allowance ("Old Water") and a surcharge for consumption above that allowance ("Growth Charge"). Wholesale customers with block contracts pay a fixed amount regardless of the amount used, up to the block volume. Excess volume is charged at penalty rates for block contracts.

2.3.2 Debt Financing

From 2007 through 2030, 65 percent of the capital facilities plan (CFP) is expected to be financed with debt, as shown in Figure 2-4.

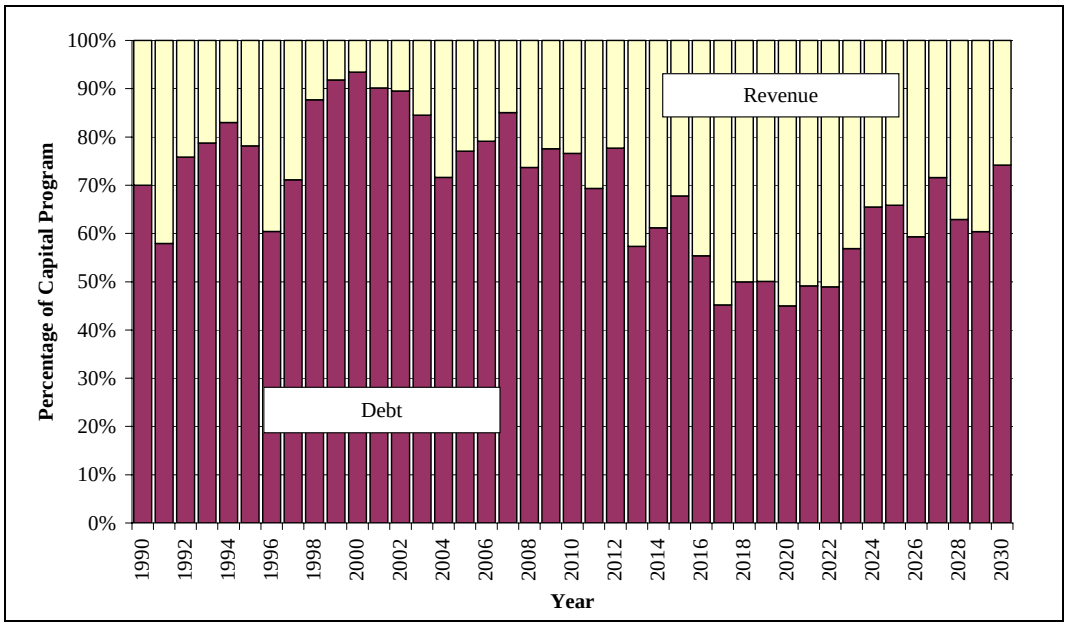

Figure 2-4. Past and Planned Debt Financing

Debt is expected to be used to finance 77 percent of the CIP through 2011 and 60 percent thereafter. The year-to-year variation in the use of debt will be caused by variation in the size of the capital program. In years where the capital program is small, available revenue will make up a larger percentage of the capital spending. When the capital program is large, debt will be relied upon more heavily.

2.3.3 Debt-to-Assets Ratio

SPU has been borrowing extensively and is expected to continue to borrow in large amounts in order to finance the capital program. This extensive use of debt means that the water system's debt-to-assets ratio has risen about 30 percent over the last 10 years and will peak at 74 percent in 2012 (Figure 2-5).

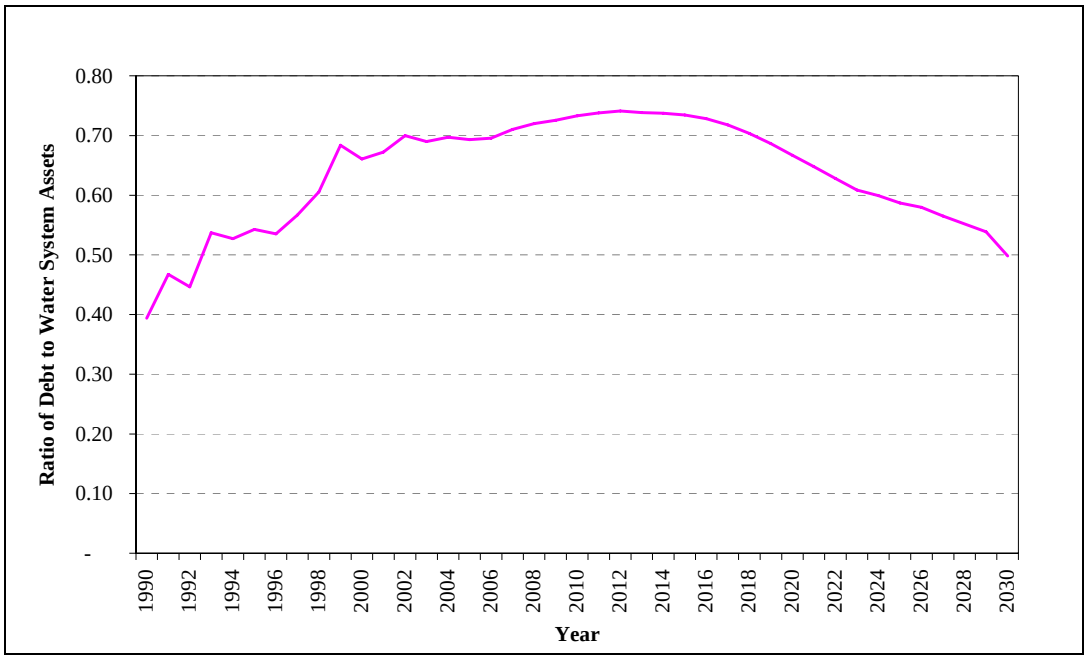

Figure 2-5. Past and Projected Debt-to-Assets Ratio

2.3.4 Alternative Financing Paths

A lower debt-to-assets ratio could be achieved more quickly by higher rate increases in the near-term, coupled with deferral of part of the capital program. This would allow a greater portion of the capital program to be financed out of revenues over time. However, it would also result in higher near-term rates, and deferring projects could prevent the water system from complying with regulatory agreements made with state and federal agencies. The proposed approach strikes a balance between short-term and long-term financing approaches, providing moderate rate increases over time, and addressing important capital and operating requirements.

2.3.5 Potential Financial Effects of Unanticipated Needs

Even with thoughtful consideration, it is often impossible to anticipate needs 20 to 30 years into the future. Future regulatory requirements or unexpected circumstances could require investments in addition to those included in the CFP. Retaining the financial flexibility to meet such unanticipated needs is an important part of planning for the future.

In order to judge the capacity of the water system to meet major unanticipated needs, a "what if" scenario was created. This scenario assumes that $10 million (in 2006 dollars) in additional capital spending would be required each year starting in 2015. Figure 2-6 shows the rate path required under this scenario.

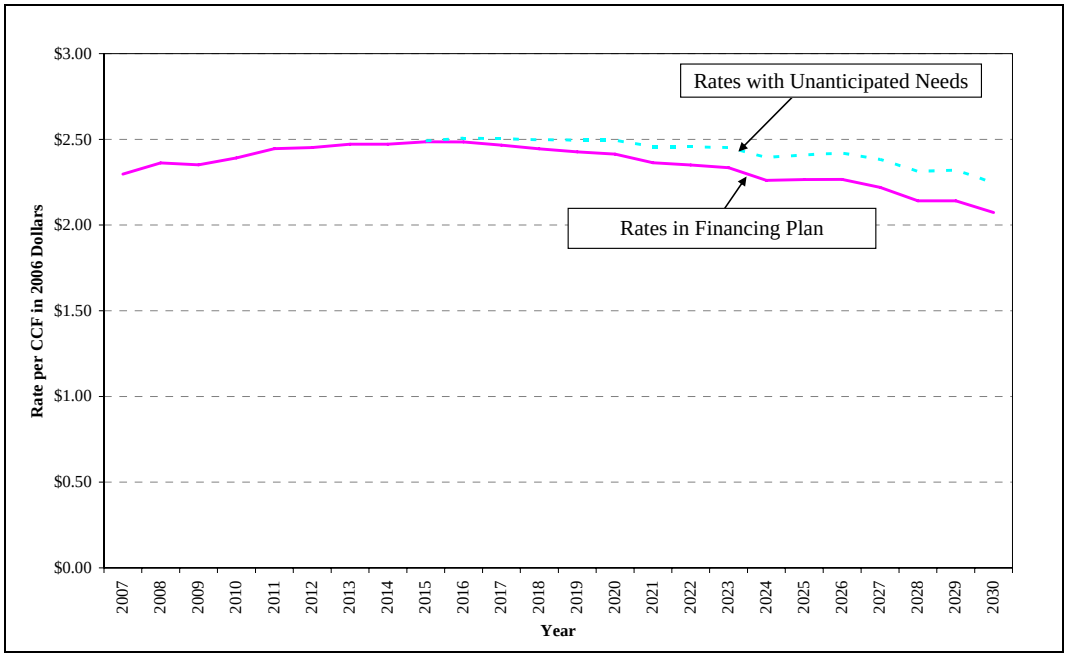

Figure 2-6. Effect of Unanticipated Needs on Average System Rates

The unanticipated needs would cause rates to decrease more slowly after 2015, in real terms, than they would without the unanticipated needs. Most of the additional capital spending for the unanticipated needs would be financed by debt.

As a result of the unanticipated needs in this scenario, debt would be used to fund about ten percent more of the CFP from 2015-2030. This additional reliance on debt financing would cause a small increase in the debt-to-assets ratio, which is already relatively high even without considering the unplanned needs scenario. Such an increase in the debt-to-assets ratio could cause SPU to incur even higher interest rates on future borrowing.

2.4 FINANCIAL MODEL CASH FLOW ANALYSIS

The capital improvements summarized in the Part II, Chapter 1, together with projected operating expenses through 2030, were incorporated into the water system's financial model in order to develop a long-term picture of rate requirements and financial performance. The anticipated cash flows and financial performance generated by the financial model are summarized at five-year intervals in Table 2-2.

Table 2-2. Summary of Water System Cash (in million $)

Revenue/Expenditures[a]	2010	2015	2020	2025	2030
Revenues					
Water Sales	163	196	219	226	229
Other (tap fees, interest income, operational grants, reimburse-ments, etc.)	12	13	15	16	17
Total revenues	175	209	233	242	246
Expenditures					
O&M	70	79	90	103	118
Taxes	27	33	38	40	41
Debt service	69	83	90	88	76
Revenue-financed construction	7	12	14	9	6
Total expenditures	173	207	233	241	241
Net revenue[b]	2	1	1	2	5
Debt Service Coverage	1.7	1.7	1.7	1.7	1.8
Debt-to-Assets ratio	0.73	0.73	0.67	0.59	0.50
Cash balance	6	7	8	9	10
Capital Facilities Financing	2007-2010	2011-2015	2016-2020	2021-2025	2026-2030
Revenue financing	26	52	65	59	54
Contributions in aid of construction	32	41	44	47	50
Debt financing	218	196	106	146	202
Total CFP financing	276	290	215	251	306

[a] Actual dollars spent or received in any given year; revenues and expenditures are inflated to off-set the erosion of purchasing power over time due to inflation.

[b] Revenues and expenditures do not net zero in this summary because of rounding errors, contributions to cash balances, and lags between when revenues are billed and when they are received

The rate of growth in cash expenditures is highest in the first half of the plan. During this period, capital

expenditures are at their peak, with significant expenditures on such things as the reservoir covering and replacement program, improvements to the Chester Morse Lake Dead Storage facilities, and distribution infrastructure replacement. Some capital improvements could be deferred by SPU, thereby moderating the growth in rates in the early years. Large cash contributions to the capital improvement program will result in a reduction in debt service in later years. The debt-to-assets ratio is expected to peak in 2012 and decline steadily thereafter.

2.5 CONCLUSION

While SPU supply sources are projected to have adequate capacity for another 50 years or more, and SPU does not anticipate the need for additional water treatment improvements, significant capital investments in the system have been identified as needed. SPU has been making, and continues to make, significant investments to protect public health, comply with federal and state regulations, and replace aging infrastructure. In order to pay for the facilities, particularly to pay off debt for the new drinking water treatment and other facilities recently added to the system, customer rates will need to increase somewhat higher than the rate of inflation, until about 2015. After 2015, however, rates can be expected to stabilize and begin to decrease in real terms. This outlook positions SPU to meet unanticipated needs in the future to ensure reliable delivery of high quality water to its customers.